

ABSTRACT

An electro-dose and a method and a process for obtaining an electro-dose are disclosed. The electro-dose constitutes a metered medical powder and is formed from an electro-powder constituting an active powder substance or a dry powder medical formulation being transferred onto a device member forming a dose carrier. The electro-dose prepared from an electro-powder presents a fine particle fraction (FPF) having of the order 50 % or more of its content with a particle size between 0.5-5 μm . The electro-powder of such a metered electro-dose further provides electrostatic properties regarding absolute specific charge per mass after charging of the order 0.1 to 25 $\mu\text{C/g}$ and presents a charge decay rate constant Q_{50} of more than 0.1 sec with a tap density of less than 0.8 g/ml and a water activity a_w of less than 0.5.

The electro-dose porosity is adjusted by means of mechanical and/or electrical vibration of the dose receiving device member during the electro-dose build-up operation to obtain an optimized porosity value in percent of 75 to 99.9 calculated as $100 - 100 \times (\text{Density}_{\text{electro-dose}} / \text{Density}_{\text{electro-powder}})$. The method and the processing of electro-doses is partly illustrated by a flow-chart in which steps 220 to 270 present parameters necessary to be kept under strict control.

(Fig. 2)